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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/492,028	01/26/2000	Charles S. Zuker	02307E- 092610	9361

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MCLEAN, VA 22102

EXAMINER

BUNNER, BRIDGET E

ART UNIT	PAPER NUMBER
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1647

DATE MAILED: 02/11/2002

/b

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/492,028

Applicant(s)

ZUKER, CHARLES S.

Examiner

Bridget E. Bunner

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 December 2001.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4 and 6-8 is/are pending in the application.
- 4a) Of the above claim(s) 5 and 9-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-24 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Election/Restrictions***

It is noted in Applicant's response of 13 August 2001 (Paper No. 13) that since the Examiner finalized the Restriction requirement in Paper No. 11 (07 February 2001), Applicant will petition the Commission to request that restriction requirement be withdrawn with respect to Groups I-III and that all claims be examined together.

### ***Status of Application, Amendments and/or Claims***

The amendments of 13 August 2001 (Paper No. 13) and 05 December 2001 (Paper No. 15) have been entered in full. Claim 1 is amended.

This application contains claims 5 and 9-24 drawn to an invention nonelected without traverse in Paper No. 10 (22 December 2000). A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-4 and 6-8 are under consideration in the instant application.

### ***Withdrawn Objections and/or Rejections***

1. The objections to the specification at pg 4 of the previous Office Action (Paper No. 11, 07 February 2001) are *withdrawn in part* in view of the amended claims (Paper No. 13, 13 August 2001). Please see section on Specification below.

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2. The objection to claims 1-4 and 6-8 at pg 4-5 of the previous Office Action (Paper No. 11, 07 February 2001) are *withdrawn* in view of the amended claims (Paper No. 13, 13 August 2001).

3. The rejection of claims 1-4 and 6-8 under 35 U.S.C. § 112, second paragraph at pg 5-6 of the previous Office Action (Paper No. 11, 07 February 2001) are *withdrawn in part* in view of the amended claims and Applicant's persuasive arguments (Paper No. 13, 13 August 2001; Paper No. 15, 05 December 2001). Please see section on 35 U.S.C. § 112, second paragraph, below.

### ***Specification***

4. The objection to the specification regarding the issue of patent applications being referenced throughout the disclosure is maintained and held in abeyance until allowable subject matter is identified.

### ***Claim Rejections - 35 USC § 112, second paragraph***

5. Claims 1-4 and 6-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. Claims 1-4 and 6-8 are vague and indefinite because the claims do not recite what type of binding will occur to be able to identify a compound. For example, will an increase, decrease, or no change in binding of radiolabeled GTP to the G-protein alpha subunit polypeptide identify a compound that modulates sensory signaling? The basis for this rejection is set forth for claims 1-4 and 6-8 at pg 5 of the previous Office Action (Paper No. 11, 07 February 2001).

Applicant's arguments (Paper No. 13, 13 August 2001), as they pertain to the rejections have been fully considered but are not deemed to be persuasive for the following reasons.

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Applicant asserts that the specification describes that determining the function effect refers to an assay that “increases or decreases” a parameter that is directly or indirectly under the influence of the claimed G-protein alpha subunit. Applicant argues that since the specification clearly describes what kind of binding will occur, e.g. an increase or a decrease, the rejection should be withdrawn. Applicant’s arguments have been fully considered but are not found to be persuasive because it is inappropriate to read limitations in the specification into the claims. The claims must independently define the invention for which patent protection is sought. Therefore, the claims are still rejected as being indefinite because the claims do not recite the type of binding that must occur between radiolabeled GTP and the G-protein alpha subunit polypeptide.

***Claim Rejections - 35 USC § 103***

7. Claims 1-4 and 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Freissmuth et al. (Mol Pharmacol 49: 602-611, 1996) in view of Wilkie et al. (Proc Natl Acad Sci USA 88: 10049-10053, 1991). The basis for this rejection is set forth for claims 1-4 and 6-8 at pg 6-7 of the previous Office Action (Paper No. 11, 07 February 2001).

Applicant’s arguments (Paper No. 13, 13 August 2001), as they pertain to the rejections have been fully considered but are not deemed to be persuasive for the following reasons. Applicant asserts that the cited references fail to teach or disclose all of the claimed elements. Applicant argues that the present claims are directed to a method of identifying modulators of signal transduction in sensory cells. Applicant contends that none of the cited references disclose that the claimed G protein alpha subunit is expressed in a sensory cells, specifically, a taste receptor cell.

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Applicant's arguments have been fully considered but are not found to be persuasive. Specifically, in response to applicant's arguments, the recitation "for identifying a compound that modulates signal transduction in sensory cells" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). Furthermore, identification of a compound via the claimed method would inherently be a compound that modulates signal transduction in sensory cells.

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***Conclusion***

No claims are allowable.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bridget E. Bunner whose telephone number is (703) 305-7148. The examiner can normally be reached on 8:00-5:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Kunz can be reached on (703) 308-4623. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-4242 for regular communications and (703) 308-4242 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0196.

*Elyabeth C. Kemmerer*

BEB  
Art Unit 1647  
February 7, 2002

ELYABETH KEMMERER  
PRIMARY EXAMINER